

REMARKS

At the outset, Applicants wish to thank Examiner Wimer for the courtesies extended to Applicants' representatives during their August 3, 2006 telephonic interview. The substance of the interview is incorporated in the following remarks.

Summary of the Office Action

Claims 1, 2 and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,969,680 to *Tsuru et al.* ("*Tsuru*").

Claims 3 and 5-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Tsuru* in view of U.S. Patent No. 6,100,849 to *Tsubaki*.

Summary of the Response to the Office Action

Applicants amend independent claim 1 and cancel, without prejudice or disclaimer, dependent claim 5. Applicants respectfully submit that the features of the present invention are not taught or suggested by the references of record. Accordingly, claims 1-4 and 6-7 are pending for further consideration.

All Subject Matter Complies with 35 U.S.C. § 102(b)

Claims 1, 2, and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Tsuru*. Applicants respectfully traverse the rejection for the following reasons.

Applicants respectfully submit that the Office Action has not established that *Tsuru* anticipates each and every feature of Applicants' claimed invention and that all rejections under 35 U.S.C. § 102(b) should be withdrawn. Namely, Applicants contend that newly amended independent claim 1 recites the features of "a radiation electrode, having a first end which is left

open and a second end which is connected to and directly contacts the ground electrode.”

Emphasis added. At least these features are not disclosed or taught by *Tsuru*.

Tsuru discloses a surface mounted type antenna with a power supplying portion (13, 35, 52) and a radiation portion (5, 27, 56a) in lieu of a conventional inverted F-type antenna with its known disadvantages. See Figs. 4, 5, and 9A and col. 5, lines 8-67 of *Tsuru*. However, the structure of *Tsuru* fails to teach or suggest at least the above features of claim 1.

Tsuru discloses a surface mounted antenna with a radiation portion (56a) *capacitively* connected to the ground electrode. See Figures 10A and 10B of *Tsuru*. Applicants previously amended claim 1 to recite electrodes that are “connected to and directly contact,” other electrodes, and electrodes that excite other “electrode[s] with an induction coupling in a non-contact manner.” Thus, Applicants amended claim 1 to clarify that the term “connected to” would refer to surfaces that are physically in contact with each other, or couplings that have parallel surfaces that are not physically in contact with each other. However, Applicants did not specifically clarify then that “a radiation electrode . . . directly contacts the ground electrode,” as recited in newly amended claim 1. Emphasis added.

Thus, the assertion in the Office Action that the radiation electrode (56a) is *capacitively* connected to the ground electrode is moot because of the affirmative recitation of the radiation electrode directly contacting the ground electrode in newly amended claim 1. In other words, the connection between the radiation electrode and the ground electrode cannot be considered to be *capacitively* connected as suggested in the Office Action. Applicants respectfully submit that because *Tsuru* does not disclose “a radiation electrode, having a first end which is left open and a

second end which is connected to and directly contacts the ground electrode,” it cannot anticipate the invention recited in newly amended claim 1.

The Office Action also states that *Tsuru* discloses “a feeding terminal 66 provided on the first surface (Fig. 2) and a feeding electrode 52 having a first end 67b connected to and directly contacts the feeding terminal and a second end 52e which is connected to and directly contacts ground electrode 67a, at least a first part 52a of the feeding electrode 52 extending in parallel with an elongated direction of the radiation electrode 56a, so as to excite the radiation electrode with an induction coupling.” However, the Office Action is in error. If 52 is the feeding electrode, how can 67b be its first end when 67b it is not the same component and is actually the ground electrode? See Fig. 2 and col. 8, line 44 through col. 9, line 34 of *Tsuru*.

Further, the Office Action errors with regard to the feeding electrode 52. If the first end of the feeding electrode is 52d, instead of 67b as alleged, and the second end is 52e, then any “first part” must occur between these two ends of the feeding electrode 52. To the contrary, the so-called first part 52a is not located between the first end 52d and the second end 52e of the feeding electrode.

As pointed out in MPEP § 2131, a claim is anticipated by a prior art reference only if each and every element as set forth in the claim is found. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051 (Fed. Cir. 1987). Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. § 102(b) should be withdrawn because *Tsuru* does not teach or suggest each feature of independent claim 1.

Additionally, Applicants respectfully submit that dependent claims 2 and 4 are also allowable insofar as they recite the patentable combinations of features recited in claim 1, as well as reciting additional features that further distinguish over the applied prior art.

All Subject Matter Complies with 35 U.S.C. § 103(a)

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Tsuru* in view of *Tsubaki*. Applicants respectfully traverse the rejection for the following reasons.

To establish a *prima facie* case of obviousness, three basic criteria must be met (see MPEP §§ 2142-2143). First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill the art, to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art references must teach or suggest all the claim limitations. All three criteria must be met to establish obviousness.

First, the Office Action does not establish a *prima facie* case of obviousness at least because it has not identified any suggestion or motivation to combine the cited reference teachings. The background section of the specification teaches an inverted-F antenna is not desirable because the continuous impedance matching adjustment is difficult with respect to operation frequency adjustment. See page 2, line 17 through page 3, line 1 of the specification. Conversely, the present invention teaches that the radiation electrode and feeding electrode coupling may be easily adjusted and independently of the operation frequency. See page 5, lines 1-10 of the specification.

Similar to the inverted-F antenna discussed in the background section of the specification, the cited references of record disclose that a reverse-F antenna (a.k.a. inverse-F

antenna) is undesirable. *Tsuru* states “the present invention has been made to overcome the disadvantages of the conventional inverted-F antenna.” See col. 5, lines 7-10 of *Tsuru*. *Tsubaki* states that “[t]he first radiation electrode 13 in its entirety forms a reverse F antenna.” See col. 6, line 56 through col. 7, line 9 of *Tsubaki*. The cited references of record, therefore, teach away from the claimed invention because any combination of the references of record would necessarily include the known disadvantages of the inverted-F or reverse-F antenna of *Tsubaki* and would therefore result in an inferior antenna.

As such, the suggestion or motivation to combine is not provided by either the references themselves or by knowledge generally available to one of ordinary skill in the art. Therefore, it is respectfully submitted that the statement in the Office Action is not sufficient by itself to meet the first prong of *prima facie* obviousness. In fact, the MPEP § 2143.01 states that “the level of skill in the art cannot be relied upon to provide the suggestion to combine references.” *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

Second, “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).” See MPEP § 2143.01. The Office Action does not provide any citation to the references of record that shows the desirability of combining *Tsuru* and *Tsubaki*. Further, as discussed above, the combination of references necessarily includes features that teach away from the present invention. The mere assertion that *Tsuru* and *Tsubaki* could be combined is not sufficient by itself to establish *prima facie* obviousness. Therefore, it is respectfully submitted that the Office Action has not met the second prong of *prima facie* obviousness.

Third, Applicants respectfully submit that *Tsubaki* does not make up for the deficiencies identified in *Tsuru*. *Tsubaki* is only relied upon for teaching “an electrical length of the first part of the feeding electrode is substantially equal to one fourth of a wavelength at an operation frequency of the antenna.” Thus, *Tsubaki* cannot teach or suggest all the features of the present invention. As such, Applicants respectfully assert that the third prong of *prima facie* obviousness has not been met.

As pointed out in M.P.E.P. § 2143.03, “[t]o establish prima facie obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art”. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). Therefore, Applicants respectfully assert that newly amended claim 1 is distinguishable over the applied art and the rejections under 35 U.S.C. § 103(a) should be withdrawn because neither *Tsuru* nor *Tsubaki* teaches or suggests each and every feature of claims 3 and 6-7.

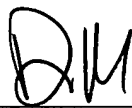
CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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